

1. Jackson 5.8
2. Jackson 5.10(a). In part (c) calculate the components of \mathbf{B} as requested. Don't evaluate \mathbf{B} along the z axis as requested. Instead, take the limit $z = 0$, show that $B_\rho = 0$ and evaluate B_z for $\rho = a - \epsilon$ with ϵ small. In this limit you can complete the integral over k . Show that the integral diverges as ϵ goes to zero. Interpret the latter.